UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/090,532	03/04/2002	Carolyn J. Brown	2762-143	6642	
6449 7590 04/09/2007 ROTHWELL, FIGG, ERNST & MANBECK, P.C.			EXAMINER		
1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005			GISHNOCK, NIKOLAI A		
			ART UNIT	PAPER NUMBER	
			3714	·.	
SHORTENED STATUTORY	PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVER	Y MODE	
3 MONTHS		04/09/2007	FLECT	FLECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/09/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

•		\mathcal{M}
	Application No.	Applicant(s)
	10/090,532	BROWN ET AL.
Office Action Summary	Examiner	Art Unit
	Nikolai A. Gishnock	3714
The MAILING DATE of this communica Period for Reply	tion appears on the cover sheet wi	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR WHICHEVER IS LONGER, FROM THE MAII - Extensions of time may be available under the provisions of 3 after SIX (6) MONTHS from the mailling date of this communium. If NO period for reply is specified above, the maximum statute. Failure to reply within the set or extended period for reply will Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	LING DATE OF THIS COMMUNIC 57 CFR 1.136(a). In no event, however, may a recation. ory period will apply and will expire SIX (6) MON, by statute, cause the application to become AB	CATION. eply be timely filed THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed of	on <u>03 February 2006</u> .	
,	☐ This action is non-final.	
3) Since this application is in condition for	allowance except for formal matte	ers, prosecution as to the merits is
closed in accordance with the practice	under Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.
Disposition of Claims		
4) Claim(s) 1-25,54-57 and 67-76 is/are p	ending in the application.	
4a) Of the above claim(s) is/are	withdrawn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-25,54-57 and 67-76</u> is/are re	ejected.	
7) Claim(s) is/are objected to.		·
8) Claim(s) are subject to restrictio	n and/or election requirement.	
Application Papers		
9) The specification is objected to by the E	Examiner.	
10)⊠ The drawing(s) filed on <u>18 June 2002</u> is	s/are: a)⊠ accepted or b)⊡ object	cted to by the Examiner.
Applicant may not request that any objection	on to the drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the		
11) The oath or declaration is objected to by	y the Examiner. Note the attached	Office Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for	foreign priority under 35 U.S.C. §	119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority do		
· · · · · · · · · · · · · · · · · · ·	cuments have been received in A	· · · · · · · · · · · · · · · · · · ·
·	the priority documents have been	received in this National Stage
application from the International	•	roceived
* See the attached detailed Office action for	or a list of the certified copies flot	received.
Attachment(s)	∧ □ 1-4	Summons (PTO 442)
1) Notice of References Cited (PTO-892)	4) L Interview S	summary (PTO-413)

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

Paper No(s)/Mail Date

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date.

6) Other: _

5) Notice of Informal Patent Application

DETAILED ACTION

In response to Applicant's remarks, filed 2/3/2006, claims 49 and 64-66 are cancelled. Claims 26-48, 50-53 and 58-63 are withdrawn from consideration. Claims 1-25, 54-57, and 67-76 are pending.

Claim Objections

1. Claim 54 is objected to because of the following informalities: Part (f) recites an apparatus including, "a database stored on the memory medium", while part (g) recites, "the database including a pre-designed set of support....", etc. However, it is unclear whether the software recited in part (h4) adapted to, "store in a database the student's response and an assessment of the student's performance....", etc. is the same database recited in parts (f) and (g), or a subsequent database. Claim 54 is treated herein as referring to separate databases. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States
- 3. Claims 1-5, 8-20, 24, 25, and 67-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Barrabee (US 4,804,328), hereinafter known as Barrabee. Barrabee discloses a method of instruction (1:62-65) comprising: presenting the learning task or skill level to a student (2:41-43); (b) presenting to the student a level of support enabling the student to achieve a predefined level of performance for the learning task or skill level from a pre-defined set of support

Art Unit: 3714

(display and reproduction of skill-level ordered information on videodisc, 2:44-60); and (c) determining a level of support necessary for the student to achieve the predefined level of performance for the learning task or skill level based on the level of support presented to enable the student to achieve the pre-defined level of performance (skill-level switches 32, 33, & 34, 8:37-68; switches determine which lesson sequence and segment to advance to, based on the student's second thoughts about the current presentation, 8:53-57) [Claims 1 & 73]. Barrabee discloses wherein the instruction is performed on an electronic device (host computer 17, 6:32-37) [Claim 5] with a user input (remote control unit 16, 5:60-63) [Claim 2], including a visual display (standard TV receiver, 6:38-44) [Claim 3], and a speaker (inherently found in a standard TV receiver or earphones) [Claim 4]. Barrabee discloses wherein the learning tasks (lesson segments) are related to learning reading comprehension (visual presentations in frames C and D, 10:1-12) [Claims 9 & 10], speaking (speaker's presentation in frame A, 9:53-61) [Claim 12], and written components (alphagraphic representation and native translation, 10:1-12) [Claim 13] of a foreign language [Claim 8]. Barrabee discloses wherein the skill level is related to words and parts of words (skill level adjustment masks speaker's words, 10:13-37) [Claim 11]. Barrabee discloses wherein the learning task or skill level is part of a curriculum (sequence of lessons, 2:41-43) [Claim 14], relating to reading (improving student's ability to read), alphabetics (alphagraphic presentation of words), phonics, phonetics, and phonological awareness (aids in sounding out words spoken), and vocabulary and comprehension (student tries to comprehend the scene and understand the speaker's words; 9:53-61 and 10:1-15) [Claim 17] of a written and spoken language [Claims 15 & 16]. Barrabee discloses wherein the curriculum (sequence of lessons) comprises one or more activities (lessons) [Claim 18], an activity comprises on or more student tasks (lesson segments, all in 2:41-3:17) [Claim 19], and a student task comprises a question, command, or comment (8:47-50) [Claim 20]. Barrabee discloses wherein the support

Art Unit: 3714

is pre-designed for each varying level of difficulty of the learning task or skill level (switch 36 will cause the repeat of a lesson segment (auditory visual support) at successively increasing skill levels, 8:37-68; skill level selections 1-4 affect the presentation, 10:13-37; a "pre-designed" videodisc is provided, 1:66-68) [Claims 24 & 25]. Barrabee discloses wherein a pre-defined level of performance is the student being able to understand each question and select an appropriate answer (student records an answer and selects it to be played back with the lesson audio for comparison and commentary, 9:11-24) [Claim 67]. Barrabee discloses presenting to the student the learning task or skill level, or a second learning task belonging to a skill level to which the first learning task belongs, and presenting a lower level support than previously determined (2:41-53) [Claims 68 & 73], determining if the student is performing the second task with lower level support, and whether to present a second skill level task (determining if Help switch 43 is exercised, 9:27-38) [Claims 69, 72, & 73], adjusting the level of support necessary based on whether the student is performing at the lower level of support (using the help switch provides feedback from the student indicating the current performance level is not being met, 9:27-38) [Claims 70, 72, & 73], including maintaining the level of support if the student is not performing at the lower level of support (determining the use of the Repeat switch 36, 9:27-38) [Claim 71] or presenting to the student a task belonging to a second skill level (determining the first use of the Forward switch 35, 9:27-38) [Claims 72 & 73], including determining a new level same as the first level if the student is not performing the first or second tasks or the lower level of support (determining combination of using Help, Forward, and Repeat switches, 9:27-53) [Claim 76]. Barrabee also discloses determining whether to present to the student a third learning task (a foreign language conversation to be imitated) belonging to a second skill level or a second skill level based on the new standard level of support (determining actuation of Review switch 44, 9:39-46) [Claim 74], and determining to present a third task belonging to the second skill

Art Unit: 3714

level when no support is necessary (switch 45 commands {the device} to present the selected sequence at a more basic skill level, where the display of video is increasingly masked at the more skilled levels, with only minimal cues are provided, 10:32-37; verifying understanding of lesson sequence using switch 45, 9:47-52) [Claim 75].

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claims 6 & 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrabee. Barrabee teaches all the features as described in the rejection of claim 1 above. What Barrabee fails to explicitly teach is wherein the student is an elementary school student, specifically a kindergarten to second grade student. However, Applicant has not disclosed that the particular age group of the user provides an advantage, solves any stated problem or is for any particular purpose. Moreover, it appears that the interactive education system of Barrabee or the Applicant's instant invention would perform equally well for teaching students at the

Art Unit: 3714

elementary school level, kindergarten to second-grade level, or higher. Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the teaching system of Barrabee for kindergarten through second-grade students, because such a modification would have been considered a mere design consideration, which fails to patentably distinguish over Barrabee [Claims 6 & 7].

Page 6

- 7. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrabee, in view of Wasowicz (US 6,435,877), hereinafter known as Wasowicz. Barrabee teaches all the features as demonstrated above in the rejection of claims 1, 14, 18, & 19. What Barrabee fails to teach is wherein the student task comprises a matching task [Claim 21], a recognition task [Claim 22], or a comparison or sequential task [Claim 23]. However, Wasowicz teaches tasks that train a user's skill at sequential memory and pattern recognition (7:57-61), and a task where the user is asked to choose a word that matches the requested manipulation of sounds in a word (9:10-13). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have incorporated the language tasks for a student, comprising matching, recognition, and sequential tasks, in the invention of Barrabee, for the purpose of coercing user mastery of sound detection in a computer-based language training environment [Claims 21-23].
- 8. Claims 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrabee, in view of Bloom et al. (US 5,597,312), hereinafter known as Bloom. Barrabee teaches an apparatus for facilitating a learning task for a student, comprising: (a) a computer (6:32-37); (b) including a display, processor, and user input (5:60-63 and 6:32-44), and (c) a memory medium (6:3-17), with (d) software installed (6:26-37), including (e) a pre-designed learning task and/or

Art Unit: 3714

Application/Control Number: 10/090,552

skill level for a student (8:43-52); the software adapted to (h1) present the learning task and/or skill level to a student on the display (2:41-53); (h2) present on the display, to the student, support from the pre-designed set (9:27-52); and (h3) adjust the support presented on the display to the student based on responses to the learning task and/or skill level from the student (8:37-68), and (h4) software adapted to store the student's responses and an assessment of the student's performance solely based on the support presented to the student in order for the student to achieve a pre-defined level of performance in the learning task and/or skill level (8:6-28, each selected switch commands a program function). Barrabee also teaches wherein the pre-designed learning task or skill level is part of a curriculum (sequence of lessons, 2:41-43) [Claim 55], wherein the curriculum relates to a language (9:53-61) [Claim 56], and wherein the curriculum related to written and/or oral language skills (9:53-10:12) [Claim 57]. What Barrabee fails to teach is (f) a database stored on the memory medium; (g) the database including the pre-designed set of support; and (h4) software adapted to store in a database the student's responses and an assessment of the student's performance [Claim 54]. However, Bloom teaches the use of databases (6:28-36), support databases (domain model), and response databases (student model, 4:10-20). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have made use of databases as the data structure for software adapted to store support, responses and assessments of a student's performance, as described by Bloom, in the computer-based language training device of Barrabee, for the purpose of maintaining a division between general tutoring knowledge and domain-specific knowledge, and linking knowledge base structures, enabling a student's problem-solving performance to be integrated throughout the knowledge base [Claim 54].

Application/Control Number: 10/090,532 Page 8

Art Unit: 3714

Response to Arguments

9. Applicant's arguments, see pages 15-16, filed 2/3/2006, with respect to the rejection(s) of claim(s) 1 under 35 USC §102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Barrabee.

10. Applicant's arguments with respect to claims 2-25, 54-57, & 65 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikolai A. Gishnock whose telephone number is 571-272-1420. The examiner can normally be reached on M-F 8:30a-5p.

Application/Control Number: 10/090,532 Page 9

Art Unit: 3714

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NAG

3/19/2007

Clahiba Misser KATHLEEN MOSSER PRIMARY FXAMINER